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10/786,537	02/26/2004	Jeroen Wigard	59643.00365	3246

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EXAMINER

HERRERA, DIEGO D

ART UNIT	PAPER NUMBER
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2617

DATE MAILED: 11/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/786,537	Applicant(s) WIGARD ET AL.	
	Examiner Diego Herrera	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/26/2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, and 17-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 6/3/05; 8/11/05; 10/11/05 were filed. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Response to Amendment

The amendment filed 2/26/2004 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: in claims 1, 18, 30-31, and 38-39; the "first radio link" is not defined in the disclosure and the "average power per bit" is nowhere to be found in the disclosure.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Objections

Claim 7 objected to because of the following informalities: the letter T is not proper the examiner considers this letter the misspelled word "THE". Appropriate correction is required.

Specification

The disclosure is objected to because of the following informalities: paragraph [0006] missing the word 'Mobile' in last sentence. Paragraph [0008] insert 'if' between the words checks and there.

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THE CHANGES MADE BY APPLICANT ARE ACCEPTED, HENCE OBJECTION IS VOID.

Claim Rejections - 35 USC § 101

THE CHANGES MADE BY APPLICANT ARE ACCEPTED, HENCE REJECTION IS VOID.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1-18, 30-31, 34, & 35-37 rejected under 35 U.S.C. 102(b) as being anticipated by Cheung et al. (streaming agent for wired network/wireless link rate-mismatch environment, icc 2003, 2003 IEEE international conference on communications. IEEE, US, vol. 5 of 5, 9 December 2002, pages 388-391, xp010642591, ISBN: 0-7803-7802-4).

3. Regarding Claim 1, Cheung et al. discloses a method of controlling a connection comprising a first link and a second link (paragraph 2.2, teaches a connection between a wire system and a wireless link), said method comprising the steps of:

a. Determining if a first link or a second link of a plurality of links is limiting capacity of said connection (paragraph 1, 2.1 & 2.2, teaches determining throughput streaming flow); and

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- b. Changing at least one parameter relating to at least one of said first and said second links to change the capacity of said first link or said second link if said at least one of said first and said second links is limiting capacity of the connection (paragraph 3-4.2, teaches measurement and reporting of limiting capacity link then changing parameters to the limiting capacity link).
- 4. Regarding claim 18, Cheung et al. discloses a method of controlling a connection comprising a first link and a second link (paragraph 2.2, teaches a connection between a wire system and a wireless link), said method comprising the steps of:
 - c. Determining if a first link or a second link is limiting capacity of said connection (paragraph 1, 2.1 & 2.2, teaches determining throughput streaming flow); and
 - d. Changing at least one parameter relating to at least one of said first and said second links whereby the other of said first and said second links is used to improve the quality of said connection if said one of said first and said second links is limiting capacity (paragraph 3-4.2, teaches measurement and reporting of limiting capacity link then changing parameters to the limiting capacity link to improve the quality).
- 5. Regarding claim 30, Cheung et al. discloses a controller for controlling a connection comprising a first link and a second link (paragraph 2.2, teaches a connection between a wire system and a wireless link), said controller comprising:

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- e. Means for determining if said first link or said second link is limiting capacity of said connection (paragraph 1, 2.1 & 2.2, teaches determining throughput streaming flow); and
 - f. Means for causing at least one parameter relating to at least one of said first and said second links to be changed, thereby changing the capacity of said at least one of said first and said second links, if said first link or said second link is limiting capacity in the connection (paragraph 1, 2.2, & 3-4.2, teaches measurement and reporting of limiting capacity link then changing parameters to the limiting capacity link to improve the quality, RTP is there to control such changes on the parameters controlling streaming flow of congestions).
6. Regarding claim 31, Cheung et al. discloses a controller for controlling a connection comprising a first link and a second link (paragraph 2.2, teaches a connection between a wire system and a wireless link), said controller comprising:
- g. Means for determining if a first link or a second link is limiting capacity of said connection (paragraph 1, 2.1 & 2.2, teaches determining throughput streaming flow); and
 - h. Means for causing at least one parameter relating to at least one of said first and said second links to be changed if said first link or said second link is changing capacity whereby another of said first and second links is used to improve the quality of said connection (paragraph 1, 2.2, & 3-4.2, teaches measurement and reporting of limiting capacity link then changing parameters to

the limiting capacity link to improve the quality, RTP is there to control such changes on the parameters controlling streaming flow of congestions).

7. Regarding claim 36, Cheung et al. discloses a system comprising:

- i. A first entity (network agent); a second entity (wireless link); a third entity (intersection of wired network), wherein a connection is establish-able between said first, second and third entities with a first link provided between the first entity and the second entity and a second link provided between said second entity and said third entity (paragraph 1, 2.2, & 3-4.2, teaches measurement and reporting of limiting capacity link then changing parameters to the limiting capacity link to improve the quality, RTP is there to control such changes on the parameters controlling streaming flow of congestions); and
- j. A controller for controlling the connection comprising the first link and the second link, the controller including; means for determining if said first link or said second link is limiting capacity of said connection (paragraph 1, 2.2, & 3-4.2, teaches measurement and reporting of limiting capacity link then changing parameters to the limiting capacity link to improve the quality, RTC is there to control such changes on the parameters controlling streaming flow of congestions); and
- k. Changing at least one parameter for relating to at least one of said first and said second links to change the capacity of said first link or said second link if the one of said first and said second links is limiting capacity in the connection

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(paragraph 3-4.2, teaches measurement and reporting of limiting capacity link then changing parameters to the limiting capacity link).

8. Regarding claim 37, Cheung et al. discloses a computer program product comprising software code portions, the software code portions, when executed, control a connection having a first link and a second link (paragraph 2.2, teaches a connection between a wire system and a wireless link), the software code portions to effect the steps comprising:

l. Determining if a first link or a second link is limiting capacity of said connection (paragraph 1, 2.1 & 2.2, teaches determining throughput streaming flow); and

m. Changing at least one parameter relating to at least one of said first and said second links to change capacity of said first link or said second link if the one of said first and said second links is limiting capacity in the connection (paragraph 1, 2.2, & 3-4.2, teaches measurement and reporting of limiting capacity link then changing parameters to the limiting capacity link to improve the quality, RTP is there to control such changes on the parameters controlling streaming flow of congestions).

9. Consider claim 2, and as applied to claim 1 above, Cheung et al. discloses wherein the changing step comprises changing the at least one parameter relating to said at least one of said first and said second links to increase the capacity of said first link or said second link (paragraph 1, 2.1 & 2.2, teaches determining throughput streaming flow).

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10. Consider claim 3, and as applied to claim 1 above, Cheung et al. discloses wherein the changing step comprises changing the at least one parameter relating to another of said first and said second links to improve quality of said connection (paragraph 1, 2.2, & 3-4.2, teaches measurement and reporting of limiting capacity link then changing parameters to the limiting capacity link to improve the quality, RTP is there to control such changes on the parameters controlling streaming flow of congestions).

11. Consider claims 4-15, and as applied to claim 1 above, Cheung et al. discloses wherein said changing step comprises changing the at least one parameter that comprises at least one of

n. Bit rate, Error rate, Block error rate, bit error rate, Activity factor at an interface with the at least one said first link or said second link, and Scheduling of users with a given bit rate (paragraph 1, 2.2, & 3-4.2, teaches measurement and reporting of limiting capacity link then changing parameters to the limiting capacity link to improve the quality, RTP is there to control such changes on the parameters controlling streaming flow of congestions, one of those parameter being change is the rate of transmission hence bit rate).

12. Consider claim 16, CANCELLED.

13. Consider claim 17, and as applied to claim 1 above, Cheung et al. discloses wherein said determining step comprises a transport link (paragraph 1-2.2, 3-4.2).

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14. Consider claim 34, and as applied to claim 30 above, Cheung et al. discloses wherein said controller (paragraph 2.2) comprises software, said software providing one or more of the following:

o. Means for determining, means for selecting, and means for causing (paragraph 2.2).

15. Consider claim 35, and as applied to claim 30 above, Cheung et al. discloses wherein said controller is provided in a radio network controller (paragraph 1-2.2).

16. Claims 19-29, & 32-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Harris et al. (US patent publication 20020146024 A1).

17. Regarding claim 19, Harris et al. discloses a method of selecting a bit rate for a connection comprising a first link and a second link (abstract, title), said method comprising the steps of:

p. Determining if resources are available in a first link and a second link for a given bit rate (abstract, fig.1-5, paragraph: [0008]-[0009], teaches the consideration of data rate between links for transport of information optimization);

q. Selecting a bit rate from a plurality of bit rates for which it is determined in said determining step that resources are available in both said first and said second links; and Using said selected bit rate in said connection (paragraph: [0017]-[0021] & [0037], teaches using resources to regulate congestions of data transmission).

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18. Regarding claim 29, Harris et al. discloses a method of changing a bit rate for one of a plurality of connections comprising a first link and a second link (abstract, title), said method comprising the steps of:

- r. Selecting a new bit rate for a connection of a plurality of connections (abstract, fig.1-5, paragraph: [0008]-[0009], teaches the consideration of data rate between links for transport of information optimization);
- s. Determining if resources are available in both said first and second links for said new bit rate; and Selecting said new bit rate for said connection if the resources are available (paragraph: [0017]-[0021] & [0037], teaches using resources to regulate congestions of data transmission).

19. Regarding claim 32, Harris et al. discloses a controller for changing a bit rate for one connection of a plurality of connections comprising a first link and a second link (abstract, title), said controller comprising:

- t. Means for selecting a new bit rate for said one connection (abstract, fig.1-5, paragraph: [0008]-[0009], teaches the consideration of data rate between links for transport of information optimization); and
- u. Means for determining if resources are available in both said first and second links for said new bit rate (abstract, fig.1-5, paragraph: [0008]-[0009], teaches the consideration of data rate between links for transport of information optimization); and Means for selecting said new bit rate for said connection if said resources are available (paragraph: [0017]-[0021] & [0037], teaches using resources to regulate congestions of data transmission).

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20. Regarding claim 33, Harris et al. discloses a controller for changing a bit rate for one connection of a plurality of connections comprising a first link and a second link (abstract, title), said controller comprising:

v. Means for selecting a new bit rate for said one connection (abstract, fig. 1-5, paragraph: [0008]-[0009], teaches the consideration of data rate between links for transport of information optimization); and

w. Means for determining if resources are available in both said first and second links for said new bit rate (abstract, fig. 1-5, paragraph: [0008]-[0009], teaches the consideration of data rate between links for transport of information optimization); and Means for selecting said new bit rate for said connection if said resources are available (paragraph: [0017]-[0021] & [0037], teaches using resources to regulate congestions of data transmission).

21. Consider claim 20, and as applied to claim 19 above, Harris et al. discloses wherein said determining step comprises performing said determining initially with a minimum bit rate with each successive determining step using a higher bit rate (fig. 3-5, paragraph [0018]-[0021]).

22. Consider claim 21, and as applied to claim 19 above, Harris et al. discloses wherein said determining step comprises performing said determining step initially with a maximum bit rate with each successive determining step using a lower bit rate (fig. 3 & 4, paragraph [0018]-[0021]).

23. Consider claim 22, and as applied to claim 20 above, Harris et al. discloses wherein said determining step comprises performing said determining step until the bit

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rate is selected for which resources are available in both said first and said second links (fig. 3, paragraph [0018]-[0021]).

24. Consider claim 23, and as applied to claim 19 above, Harris et al. discloses wherein said selecting step comprises selecting the highest bit rate for which resources are available in both said first and said second links (abstract, title, paragraph: [0008]-[0009], [0018]-[0021], fig. 3-4).

25. Consider claims 24-26, and as applied to claim 19 above, Harris et al. discloses wherein said determining step comprises determining for said first link if sufficient code or power or hardware or base band resources are available (fig. 3-5; paragraph [0018]-[0021]).

26. Consider claim 27, and as applied to claim 26 above, Harris et al. discloses wherein said determining and selecting steps comprise determining and selecting for at least two of said plurality of connections (fig. 1-5, abstract, paragraph [0056]-[0060]).

27. Consider claim 28, and as applied to claim 26 above, Harris et al. discloses wherein said determining step for said second link comprises summing the bit rates for said plurality of connections (fig. 3-5, paragraph [0020]-[0021], [0024]-[0036] & [00337]).

28. Consider claim 38, an apparatus, comprising:

Determining means for determining if a first radio link or second link is limiting capacity of a connection comprising the first radio link and the second link; and

Causing means for causing at least one parameter relating to at least one of said first and said second links to be changed, thereby changing the capacity of said

second link is limiting capacity in the connection, whereby the average power per bit in said radio link is changed.

29. Consider claim 39, an apparatus, comprising:

Determining means for determining a first link or a second link is limiting capacity of a connection comprising the first link and the second link; and

Causing means for causing at least one parameter relating to at least one of said first and said second links to be changed if said first link or said second link is limiting capacity whereby another of said first and second links is used to improve the quality of said connection, whereby the average power per bit in said radio link is changed.

30. Consider claim 40, an apparatus, comprising:

Determining means for determining for a plurality of bit rates if resources are available in both a first and second links for a given bit rate to select a bit rate from a connection comprising a first link and a second link; and

Selecting means for selecting a bit rate for which it is determined in said determining that the resources are available in both said first and second links.

31. Consider claim 41, an apparatus, comprising:

Selecting means for selecting a new bit rate for one connection to change the bit rate for the one connection of a plurality of connections including a first link and a second link; and

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Determining means for determining if resources are available in both said first and second links for said new bit rate; and
Selecting means for selecting said new bit rate for said connection if said resources are available.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diego Herrera whose telephone number is (571) 272-0907. The examiner can normally be reached on Monday-Thursdays, 6:30 AM-3:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kincaid G. Lester can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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